WHAT IS CLAIMED IS:

1. A method for obtaining a transgenic plant having an improved agronomic characteristic which comprises:

(a) preparing DNA fragments from DNA of a donor plant species;

(b) transforming plant cells of a recipient plant species with said DNA fragments;

(c) selecting transformed plant cells;

(d) regenerating plants from the transformed plant cells;

(e) harvesting seed from the regenerated plants;

(f) planting the harvested seed and growing the resultant plants;

(g) analyzing the plants for improved agronomic characteristics; and

(h) selecting plants having an improved agronomic characteristic.

2. The method of claim 1, wherein said DNA fragments are inserted into a vector prior to transforming plant cells.

3. The method of claim 2, wherein said DNA fragments inserted into a vector are inserted between two selectable markers.

4. The method of claim 1, wherein seed is harvested from regenerated plants which have been selfed.

5. The method of claim 1, wherein seed is harvested from regenerated plants which have been backcrossed to the recipient plant species.

6. The method of claim 1, wherein said plants having an improved agronomic characteristic are introduced into a breeding program to produce progeny of said plants, said progeny maintaining said improved agronomic characteristic.

7. The method of claim 1, wherein said donor plant is sorghum and said recipient plant is maize.

8. A transgenic plant produced by the process of claim 1.

9. A transgenic plant produced by the process of claim 2.

10. A transgenic plant produced by the process of claim 3.

11. A transgenic plant produced by the process of claim 4.

12. A transgenic plant produced by the process of claim 5.

13. A transgenic plant produced by the process of claim 6.

14. A transgenic plant produced by the process of claim 7.

15. A method for obtaining a transgenic plant having an improved agronomic characteristic which comprises:

(a) preparing DNA fragments from DNA of a donor plant species;

(b) inserting said DNA fragments into a vector;

(c) transforming plant cells of a recipient plant species with said vector containing said DNA fragments;

(d) selecting transformed plant cells;

(e) regenerating plants from the transformed plant cells;

(f) harvesting seed from the regenerated plants;

(g) planting the harvested seed and growing the resultant plants;

(h) analyzing the plants for improved agronomic characteristics;

(i) selecting plants having an improved agronomic characteristic;

(j) harvesting seed from said selected plants; and

Sub A2 cont'd

(k) introducing seed from said selected plants into a breeding program to produce progeny of said plants, said progeny maintaining said improved agronomic characteristic.

16. The method of claim 15, wherein said DNA fragments inserted into a vector are inserted between two selectable markers.

17. The method of claim 15, wherein seed is harvested from regenerated plants which have been selfed.

Sub B3

18. The method of claim 15, wherein seed is harvested from regenerated plants which have been backcrossed to the recipient plant species.

19. A transgenic plant produced by the process of claim 15.

20. A transgenic plant produced by the process of claim 16.

21. A transgenic plant produced by the process of claim 17.

22. A transgenic plant produced by the process of claim 18.